

## CLAIMS

1. In a mobile communication device, a method of selecting a wireless communication network for communication comprising the acts of:

5 causing one of a plurality of software applications on a mobile communication device to be executed, each software application being associated with a corresponding one of a plurality of quality of service criteria for data communications through a wireless communication network;

10 scanning to identify a plurality of wireless communication networks in a coverage area of the mobile communication device; and

selecting one of the identified wireless communication networks for data communication based on the quality of service criterion associated with the executed software application.

15 2. The method of claim 1, further comprising:

identifying available quality of service data for each one of the plurality of wireless communication networks; and

wherein the act of selecting is based on a match between the quality of service criterion of the executed software application and the available quality of service data identified for the identified wireless communication network.

20 3. The method of claim 1, wherein the executed software application comprises one of: a video player application, an audio player application, a video game application, a voice-over-IP application, an e-mail application, and an Internet data application.

25 4. The method of claim 1, wherein the plurality of software applications comprises at least two of: a video player application, an audio player application, a video game application, a voice-over-IP application, an e-mail application, and an Internet data application.

5. The method of claim 1, wherein the quality of service criterion comprises one of: a bandwidth criterion, a delay criterion, a delay variation criterion, and a data loss criterion.

5 6. The method of claim 1, wherein the quality of service criterion comprises a bandwidth criterion.

7. The method of claim 1, wherein the plurality of quality of service criteria comprises at least two of: a bandwidth criterion, a delay criterion, a delay variation criterion,  
10 and a data loss criterion.

8. The method of claim 1, wherein the act of selecting comprises utilizing one of a plurality of network selection tables which correspond to a plurality of traffic classes of the software applications.

15 9. The method of claim 1, further comprising:  
identifying available quality of service data for each one of the plurality of wireless communication networks;  
populating one or more data tables with the available quality of service data for the  
20 plurality of wireless communication networks; and  
using the one or more data tables in the selecting of one of the identified wireless communication networks.

10. The method of claim 1, further comprising:  
25 registering with the selected wireless communication network.

11. A mobile communication device, comprising:  
memory;  
a plurality of software applications for storing in the memory;

each software application being associated with a corresponding one of a plurality of quality of service criteria for data communications through a wireless communication network;

one or more processors;

5 the one or more processors being operative to:

execute one of the software applications;

scan to identify a plurality of wireless communication networks available in a coverage area of the mobile communication device; and

10 select one of the identified wireless communication networks for communication based on the quality of service criterion associated with the executed software application.

12. The mobile device of claim 11, wherein the one or more processors are further operative to:

15 identify available quality of service data for each one of the plurality of wireless communication networks; and

wherein the selecting is based on a match between the quality of service criterion of the executed software application and the available quality of service data identified for the identified wireless communication network.

20 13. The mobile device of claim 11, wherein the executed software application comprises one of: a video player application, an audio player application, a video game application, a voice-over-IP application, an e-mail application, and an Internet data application.

25 14. The mobile device of claim 11, wherein the plurality of software applications comprises at least two of: a video player application, an audio player application, a video game application, a voice-over-IP application, an e-mail application, and an Internet data application.

30

15. The mobile device of claim 11, wherein the quality of service criterion comprises one of: a bandwidth criterion, a delay criterion, a delay variation criterion, and a data loss criterion.

5 16. The mobile device of claim 11, wherein the quality of service criterion comprises a bandwidth criterion.

17. The mobile device of claim 11, wherein the plurality of quality of service (QoS) criteria comprises at least two of: a bandwidth criterion, a delay criterion, a delay  
10 variation criterion, and a data loss criterion.

18. The mobile device of claim 11 wherein, for the act of selecting, the one or more processors are further operative to utilize one of a plurality of network selection tables which correspond to a plurality of traffic classes for the software applications.

15

19. The mobile device of claim 11, wherein the one or more processors are further operative to:

identify an available quality of service for each one of the plurality of wireless communication networks;

20

populate one or more data tables in the memory with the available quality of services for the plurality of wireless communication networks; and

use the one or more data tables in the selecting of one of the identified wireless communication networks.

25

20. The mobile device of claim 11, wherein the one or more processors are further operative to:

register with the selected wireless communication network.